

path, the metal detector having a metal detector test system to recoverably support a metal test piece, located relative to the flow path to move the test piece along the flow path past the metal detector in order to detect a sensitivity of the metal detector.

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a2 12. (ONCE AMENDED) A method to monitor a performance of a metal detection system to detect a passage of metal items along a flow path of an article handling system, the method comprising:

recoverably supporting a metal test piece to move along the flow path; and  
determining whether the metal detection system detects the metal test piece.

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a3 17. (ONCE AMENDED) An article handling system to move articles along a flow path, comprising:

a detection system comprising a detector, the detection system recoverably supporting a test piece to move along the flow path in order to detect a sensitivity of the detector.

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a4 25. (ONCE AMENDED) A method to detect a sensitivity of a detector of an article handling system, comprising:

recoverably supporting a test piece to move along a flow path of the article handling system from a first position to a second position;  
determining whether the test piece is detected; and  
moving the test piece to the first position.

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a5 31. (ONCE AMENDED) An apparatus to move articles along a flow path, comprising a detector to detect a test piece, wherein the test piece is recoverably supported to be moved along the flow path during a normal operation of the apparatus.

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a6 33. (ONCE AMENDED) An apparatus comprising:  
a combinational weigher weighing articles; and  
a detection system comprising a detector, the detection system recoverably supporting a  
test piece to move along a flow path of the articles through the weigher in order to detect a  
sensitivity of the detector.

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a7 39. (ONCE AMENDED) An apparatus comprising:  
means for weighing articles and for selecting a combination of the weighed articles which  
satisfies a predetermined weight condition; and  
a detection system comprising a detector, the detection system recoverably supporting a  
test piece to move along a flow path of the articles through said means for weighing articles in  
order to detect a sensitivity of the detector.

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a8 45. (ONCE AMENDED) An apparatus comprising:  
a combinational weigher including  
weighing units, each weighing unit weighing articles contained therein, and  
a selector selecting a combination of the weighing units less than the total number of  
weighing units which together contain weighed articles that satisfy a predetermined weight  
condition, the weighing units of the selected combination being controlled to dispense the  
weighed articles contained therein while the remaining weighing units hold weighed articles  
contained by said remaining weighing units, the dispensed articles traveling along a flow path  
through the combinational weigher to be output from the combinational weigher; and  
a detection system comprising a detector, the detection system recoverably supporting a  
test piece to move along the flow path in order to detect a sensitivity of the detector.

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Please **ADD** new claims 55-72 as follows:

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- 99 55. (NEW) An article handling system comprising:
- a flow path along which articles travel; and
  - a metal detection system having a metal detector to detect a metal item along the flow path, the metal detector having a metal detector test system to support a metal test piece, located relative to the flow path to move the test piece along the flow path past the metal detector in order to detect a sensitivity of the metal detector, wherein the metal detector test system comprises:
    - a linkage assembly comprising a plurality of links, pivoted together in a concertina arrangement, the test piece being supported on one of the links, and
    - a control system to extend the linkage assembly to move the test piece along the flow path.
56. (NEW) An article handling system comprising:
- a flow path along which articles travel; and
  - a metal detection system having a metal detector to detect a metal item along the flow path, the metal detector having a metal detector test system to support a metal test piece, located relative to the flow path to move the test piece along the flow path past the metal detector in order to detect a sensitivity of the metal detector,
    - wherein the flow path extends in a substantially vertical direction, and the metal detector test system comprises:
      - an elongate flexible line carrying the test piece, wherein the elongate flexible line is lowered along the flow path, and
      - a control system to control a lowering of payout of the line.

57. (NEW) An article handling system to move articles along a flow path, comprising:  
a detection system comprising a detector, the detection system moving a test piece  
along the flow path in order to detect a sensitivity of the detector, wherein the detection system  
comprises a linkage assembly to support the test piece.

58. (NEW) An article handling system to move articles along a flow path, comprising:  
a detection system comprising a detector, the detection system moving a test piece  
along the flow path in order to detect a sensitivity of the detector, wherein the detection system  
comprises a flexible line to support the test piece.

59. (NEW) An apparatus comprising:  
a combinational weigher weighing articles; and  
a detection system comprising a detector, the detection system moving a test piece  
along a flow path of the articles through the weigher in order to detect a sensitivity of the  
detector, wherein the detector is a metal detector and the test piece is a metal test piece, and  
the detection system comprises a probe to support the test piece.

60. (NEW) A system according to claim 59, wherein the detection system moves the  
test piece along the flow path by moving the probe between an extended and a retracted  
position.

61. (NEW) An apparatus comprising:  
a combinational weigher weighing articles; and  
a detection system comprising a detector, the detection system moving a test piece

along a flow path of the articles through the weigher in order to detect a sensitivity of the detector, wherein the detection system comprises a linkage assembly to support the test piece.

62. (NEW) An apparatus comprising:

a combinational weigher weighing articles; and

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a detection system comprising a detector, the detection system moving a test piece along a flow path of the articles through the weigher in order to detect a sensitivity of the detector,

wherein the detection system comprises a flexible line to support the test piece.

63. (NEW) An apparatus comprising:

means for weighing articles and for selecting a combination of the weighed articles which satisfies a predetermined weight condition; and

a detection system comprising a detector, the detection system moving a test piece along a flow path of the articles through said means for weighing articles in order to detect a sensitivity of the detector,

wherein the detection system comprises a probe to support the test piece.

64. (NEW) An apparatus comprising:

means for weighing articles and for selecting a combination of the weighed articles which satisfies a predetermined weight condition; and

a detection system comprising a detector, the detection system moving a test piece along a flow path of the articles through said means for weighing articles in order to detect a sensitivity of the detector,

wherein the detector is a metal detector and the test piece is a metal test piece, and the

detection system moves the test piece along the flow path by moving the probe between an extended and a retracted position.

65. (NEW) An apparatus comprising:

means for weighing articles and for selecting a combination of the weighed articles which satisfies a predetermined weight condition; and

a detection system comprising a detector, the detection system moving a test piece along a flow path of the articles through said means for weighing articles in order to detect a sensitivity of the detector,

wherein the detection system comprises a linkage assembly to support the test piece.

66. (NEW) An apparatus comprising:

means for weighing articles and for selecting a combination of the weighed articles which satisfies a predetermined weight condition; and

a detection system comprising a detector, the detection system moving a test piece along a flow path of the articles through said means for weighing articles in order to detect a sensitivity of the detector,

wherein the detection system comprises a flexible line to support the test piece.

67. (NEW) An apparatus comprising:

a combinational weigher including weighing units, each weighing unit weighing articles contained therein, and

a selector selecting a combination of the weighing units less than the total number of weighing units which together contain weighed articles that satisfy a predetermined weight condition, the weighing units of the selected combination being controlled to dispense the weighed articles contained therein while the remaining weighing units hold weighed articles

contained by said remaining weighing units, the dispensed articles traveling along a flow path through the combinational weigher to be output from the combinational weigher; and

a detection system comprising a detector, the detection system moving a test piece along the flow path in order to detect a sensitivity of the detector,

wherein the detection system comprises a probe to support the test piece.

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68. (NEW) A system according to claim 67, wherein the detection system moves the test piece along the flow path by moving the probe between an extended and a retracted position.

69. (NEW) An apparatus comprising:

a combinational weigher including weighing units, each weighing unit weighing articles contained therein, and

a selector selecting a combination of the weighing units less than the total number of weighing units which together contain weighed articles that satisfy a predetermined weight condition, the weighing units of the selected combination being controlled to dispense the weighed articles contained therein while the remaining weighing units hold weighed articles contained by said remaining weighing units, the dispensed articles traveling along a flow path through the combinational weigher to be output from the combinational weigher; and

a detection system comprising a detector, the detection system moving a test piece along the flow path in order to detect a sensitivity of the detector,

wherein the detection system comprises a linkage assembly to support the test piece.

70. (NEW) An apparatus comprising:

a combinational weigher including weighing units, each weighing unit weighing articles

contained therein, and

a selector selecting a combination of the weighing units less than the total number of weighing units which together contain weighed articles that satisfy a predetermined weight condition, the weighing units of the selected combination being controlled to dispense the weighed articles contained therein while the remaining weighing units hold weighed articles contained by said remaining weighing units, the dispensed articles traveling along a flow path through the combinational weigher to be output from the combinational weigher; and

a detection system comprising a detector, the detection system moving a test piece along the flow path in order to detect a sensitivity of the detector,

wherein the detection system comprises a flexible line to support the test piece.

71. (NEW) The system of claim 60, wherein the probe is moved to the extended position at a falling speed of the articles.

72. (NEW) The system of claim 71, wherein the probe is extended at a predetermined time after receiving a discharge signal, thereby extending the probe between a passage of successive articles.

### REMARKS

#### INTRODUCTION:

In accordance with the foregoing, claims 1, 12, 17, 25, 31, 33, 39 and 45 have been amended. New claims 55-72 have been added. Claims 1-72 are pending and under consideration. Claims 3, 5, 21, 22, 35-38, 41-44, 47-50, 53 and 54 are "objected to."

#### REJECTION UNDER 35 U.S.C. §102: